

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. *(Currently Amended)* A line ~~Line~~-driver for amplifying an input signal, said line driver comprising:

a digital non-linear amplifier ~~(3)~~ arranged to provide a first output signal amplifying said input signal,

a digital to analog converter that converts the input signal into an analog input signal,

an analog ~~analogue~~-linear amplifier ~~(5)~~ providing a second output signal based on the difference between the analog input signal and the first output signal, and placed in parallel with said non-linear amplifier ~~and being dependent thereon~~, and

combining means arranged to combine said first output signal and said second output signal to provide a total output signal to an output line ~~(7)~~.

2. *(Currently Amended)* A line ~~Line~~-driver for amplifying an input signal, said line driver comprising:

a first input terminal ~~(11)~~ for receiving said input signal,

a digital non-linear amplifier ~~(3)~~ connected to said input terminal ~~(11)~~ and arranged to provide a first output signal at a first output terminal ~~(13)~~,

a digital to analog converter connected to said input terminal and arranged to provide an analog output signal,

an analog ~~analogue~~-linear amplifier (5)-comprising a second (6)-and a third input terminal (8)-and a second output terminal-(10), set up as a comparator between said analog input signal and said first output signal and arranged to provide a second output signal at said second output terminal-(10), and

combining means arranged to combine said first output signal and said second output signal to provide a total output signal to an output line-(7).

3. *(Currently Amended)* The line ~~Line~~-driver as in claim 1, wherein ~~characterised in that~~ the proportion of the first output signal in the total output signal is at least 95%.

4. *(Currently Amended)* The line ~~Line~~-driver as in claim 1, wherein ~~characterised in that~~ the line driver comprises a digital to analogue converter (15) arranged to convert the input signal to an analogue input signal and that said analog ~~analogue~~-input signal is fed to an ~~the~~ second input terminal (6)-of the linear amplifier-(5).

5. *(Currently Amended)* The line ~~Line~~-driver as in claim 1, wherein ~~characterised in that~~ the linear amplifier (5)-is selected from the group consisting of class A and class A/B amplifiers.

6. (*Currently Amended*) The line ~~Line~~-driver as in claim 1, wherein ~~characterised in that~~ the non-linear amplifier (3) is selected from the group consisting of switching mode amplifiers, clipping amplifiers, class B, G or K amplifiers and pulse width modulation amplifiers.

7. (*Currently Amended*) The line ~~Line~~-driver as in claim 1, wherein ~~characterised in that~~ the combining means comprise a hybrid (9).

8. (*Currently Amended*) The line ~~Line~~-driver as in claim 1, wherein ~~characterised in that~~ the input signal is generated by a DMT (2).

9. (*Currently Amended*) The line ~~Line~~-driver as in claim 1, further comprising ~~characterised in that it further comprises~~ an active back termination circuit.

10. (*Currently Amended*) An analog ~~analogue~~-digital combined amplifier comprising:
a non-linear digital amplifier receiving an input signal and (3) ~~serving as an independent~~
current source,

a digital to analog converter receiving said input signal and outputting an analog input
signal, and

an analog ~~analogue~~-linear amplifier (5) ~~serving as a voltage source dependent on said~~
non-linear digital amplifier and said analog input signal,

wherein the output of said ~~analog~~analogue-digital combined amplifier is a combination of the output of said non-linear digital amplifier and said ~~analog~~analogue-linear amplifier.

11. (*Currently Amended*) ~~The analog~~Analogue-digital combined amplifier as in claim 10, ~~wherein characterised in that~~ the linear amplifier (5) is selected from the group consisting of class A and class A/B amplifiers.

12. (*Currently Amended*) ~~The analog~~Analogue-digital combined amplifier as in claim 10, ~~wherein characterised in that~~ the non-linear amplifier (3) is selected from the group consisting of switching mode amplifiers, clipping amplifiers, class B, G or K amplifiers and pulse width modulation amplifiers.

13. (*Currently Amended*) A method for amplifying an input signal, wherein the method comprises~~comprising the following steps:~~

~~providing a line driver (1) such as in claim 1,~~
~~feeding said line driver (1) at the input terminal (11) with said input signal,~~
~~a first amplifying step, comprising amplifying said input signal with a digital the non-~~
linear amplifier (3) and providing ~~a the~~ first output signal at ~~a the~~ first output terminal (13),
~~a second amplifying step, performed in parallel with said first amplifying step and~~
~~comprising a performing a digital to analog~~analogue-conversion of the input signal to an analog
analogue-input signal in parallel with the amplifying of the input signal with said digital non-

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linear amplifier, and comparing said ~~analog analogue~~ input signal with said first output signal using an ~~analog analogue~~ linear amplifier-(5), and providing a second output signal at a the second output terminal-(10), and

~~a combination step comprising~~ combining said first output signal with said second output signal to obtain a total output signal to an output line-(7).

14. (*Currently Amended*) The method as in claim 13, wherein the combining of said first output signal with said second output signal characterised in that said combination step is performed using a hybrid-(9).

15. (*Currently Amended*) The method as in claim 13, wherein characterised in that the input signal is generated by a DMT-(2).